Neurodegenerative Diseases – Current Awareness



The burden of neurodegenerative diseases is felt not just by those who specialise in their treatment but by healthcare workers in all areas, as well as members of the public acting as carers for those affected. It's important, then, for everyone be aware of the latest developments.

To keep you up to date, Imperial College Library has compiled a selection of the latest evidence in this important area including guidance, research, elearning, patient information & more. There's lots to choose from this time, so remember to get in touch if you need help finding specific information!

Guidelines, Guidance and Toolkits

<u>Global cohort portal</u> [a searchable catalogue of cohort studies that covers both disease-focused and general population studies]

The EU Joint Programme: Neurodegenerative Disease Research

NICE guideline [NG71]. Parkinson's disease in adults.

NICE Guidance, 2017

Interventional procedures guidance [IPG593]: Intramuscular diaphragm stimulation for ventilator-dependent chronic respiratory failure in people with motor neurone disease.

NICE Guidance, 2017

(NICE) Draft guideline dementia: assessment, management and support for people living with dementia and their carers

British Psychological Society, 2018

Occupational therapy for motor neuron disease.

Motor Neuron Disease Association, 2017

<u>Evaluation and management of respiratory symptoms in motor neurone disease: Information for</u> health and social care professionals

Motor Neuron Disease Association, 2017

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Imperial College London

Evidence Summaries & Reviews

Dementia Evaluation

DynaMed, 2017

Alzheimer dementia

DynaMed, 2017

Parkinson disease

DynaMed, 2017

Amyotrophic Lateral Sclerosis (ALS)

DynaMed, 2017

Multiple Sclerosis (MS)

DynaMed, 2018

Parkinson's disease with motor fluctuations: safinamide

NICE Evidence Summaries, 2017

Parkinson's disease with end-of-dose motor fluctuations: opicapone

NICE Evidence Summaries, 2017

Ekso exoskeleton for rehabilitation in people with neurological weakness or paralysis

NICE Medtech Innovation Briefing, 2017

Drugs, prescribing and technical information

Motor Neurone Disease Treatment Summary

BNF, January 2018

Parkinson's Disease Treatment Summary

BNF, January 2018

Dementia Treatment Summary

BNF

Essential tremor, chorea, tics, and related disorders Treatment Summary

BNF

Aricept

Electronic Medicines Compendium, December 2017

Ongentys

Electronic Medicines Compendium, September 2016

Haloperidol

Electronic Medicines Compendium, September 2017

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<u>Guideline on clinical investigation of medicinal products for the treatment of amyotrophic lateral</u> sclerosis (ALS)

European Medicines Agency, February 2016

FDA approves drug to treat ALS

Food and Drug Administration, May 2017

FDA approves first drug to treat hallucinations and delusions associated with Parkinson's disease

Food and Drug Administration, April 2016

FDA approves drug to treat Parkinson's disease

Food and Drug Administration, March 2017

FDA approves first treatment for a form of Batten Disease

Food and Drug Administration, April 2017

Optimising medicines use in care homes

Welsh Medicines Resource Centre, July 2016

Anticholinergic drugs

PrescQIPP, July 2016

Information for Patients

"There's a 50% chance I've a fatal disease. Do I find out?"

BBC News, January 2018

Parkinson's disease in adults: information for the public

NICE Guidelines

Living with early stage dementia

Age UK

Caring for someone with dementia

Age UK

Dementia and memory problems

Royal College of Psychiatrists

<u>Information for carers</u>

Royal College of Psychiatrists

All about dementia

Alzheimer's Research UK

This may be a turning point in treating neurodegenerative diseases

The Guardian, December 2017

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CPD and training

Motor neurone disease [30 minute e-learning course]

Motor Neurone Disease Association, revised 2018

Motor neurone disease advanced care [30 minute e-learning course]

Royal College of General Practitioners, updated 2018

Masterclass: Parkinson's disease, 12th September 2018 [external training fees apply]

Royal College of Occupational Therapists

Quick neurological exam for primary care [1 hour e-learning module]

BMJ Learning, November 2017

Parkinson's disease: initial assessment and referral August 2017 [1 hour e-learning module]

BMJ Learning, August 2017

Medical interventions: dementia [20 minute recorded presentation]

Royal Society of Medicine, September 2017

Dementia: Promoting quality of life and an introduction to Positive Approaches to Care (PAC), 9th

May 2018 [external training fees apply]

British Psychological Society

Supporting mind, body and spirit in neurological conditions, 4th May 2018 [external training fees apply]

British Psychological Society

Recent Journal Articles

Many articles are available with your <u>NICE OpenAthens account</u> - sign in when prompted. Some articles may only be accessible on library computers, as individually specified - and we'll be happy to help you out when you visit! If in doubt, please <u>contact your librarian</u>.

Page, T. et al. <u>Instruments measuring the disease-specific quality of life of family carers of people</u> with neurodegenerative diseases: a systematic review

BMJ Open. 7 (3), 2017. [Open Access]

Lim, K. et al. <u>Clinical Psychopharmacology and Neuroscience - A Systematic Review of the</u>
<u>Effectiveness of Medical Cannabis for Psychiatric, Movement and Neurodegenerative Disorders</u>

Clinical Psychopharmacology and Neuroscience. 15 (4), pp. 301-312, 2017. [Open Access]

Moore, M. & Barker, K. <u>The validity and reliability of the four square step test in different adult populations: a systematic review</u>

Systematic Reviews. 6, p. 187, 2017. [Open Access]

Parsons, C. & van der Steen, J. <u>Antimicrobial use in patients with dementia: current concerns</u>

and future recommendations

CNS Drugs. 31 (6), pp. 433-438, 2017. [Library access only]

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Diana, A. et al. <u>Gamma aminobutyric acid (GABA) modulators for amyotrophic lateral sclerosis/motor neuron disease</u>

Cochrane Database of Systematic Reviews, 2017

Gibbons, C. et al. <u>Treatment of fatigue in amyotrophic lateral sclerosis/motor neuron disease</u> Cochrane Database of Systematic Reviews, 2018

Pritchard, J. et al. <u>Pharmacological treatment other than corticosteroids, intravenous immunoglobulin and plasma exchange for Guillain Barré syndrome</u>

Cochrane Database of Systematic Reviews, 2017

Chang, D. A meta-analysis of genome-wide association studies identifies 17 new Parkinson's disease risk loci.

Nature Genetics. 49 (pp. 1511-1516), 2017. [OpenAthens]

Tamanini, S et al. <u>In Vivo Transient and Partial Cell Reprogramming to Pluripotency as a Therapeutic</u> Tool for Neurodegenerative Diseases.

Molecular Neurobiology. (pp 1-13), 2018. [OpenAthens]

Atri, A. et al. Effect of idalopirdine as adjunct to cholinesterase inhibitors on change in cognition in patients with Alzheimer disease three randomized clinical trials.

JAMA - Journal of the American Medical Association. 319 (2) (pp 130-142), 2017. [Library access only]

Christensen, K. D. et al. <u>A randomized controlled trial of disclosing genetic risk information for</u> Alzheimer disease via telephone.

Genetics in Medicine. 20 (1) (pp 132-141), 2018. [OpenAthens]

Mezzarobba, S. et al. <u>Action observation plus sonification</u>. A novel therapeutic protocol for Parkinson's patient with freezing of gait.

Frontiers in Neurology. 8 (JAN), 2018. [Open Access]

Conrado, D. J. et al. <u>Dopamine Transporter Neuroimaging as an Enrichment Biomarker in Early Parkinson's Disease Clinical Trials: A Disease Progression Modeling Analysis.</u>

Clinical and Translational Science. 11 (1) (pp 63-70), 2018. [Open Access]

Buchele, F. et al. <u>Sodium oxybate for excessive daytime sleepiness and sleep disturbance in</u> Parkinson disease: a randomized clinical trial.

JAMA Neurology. 75 (1) (pp 114-118), 2018. [Library access only]

Lodhi, S. K. et al. <u>Prion disease: A review of novel transmission methods and efforts at discovering</u> preventive and therapeutic modalities.

Infectious Diseases in Clinical Practice. 26 (1) (pp 3-10), 2018. [OpenAthens]

Boada, M. et al. Efficacy and safety of plasma exchange with 5% albumin to modify cerebrospinal fluid and plasma amyloid-beta concentrations and cognition outcomes in Alzheimer's disease patients: a multicenter, randomized, controlled clinical trial.

Journal of Alzheimer's Disease. 56 (1) (pp 129-143), 2017. [Open Access]

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Yoon, S. J. et al. Effects on agitation with rivastigmine patch monotherapy and combination therapy with memantine in mild to moderate Alzheimer's disease: a multicenter 24-week prospective randomized open-label study (the Korean EXelon Patch and combination with mEmantine Comparative Trial study).

Geriatrics and Gerontology International. 17 (3) (pp 494-499), 2017. [OpenAthens]

Takamatsu, Y. et al. <u>Combined immunotherapy with "anti-insulin resistance" therapy as a novel therapeutic strategy against neurodegenerative diseases.</u>

Parkinson's Disease. 3 (1), 2017. [Open Access]

Arevalo-Villalobos, J. I. et al. <u>Immunotherapies for neurodegenerative diseases: current status and potential of plant-made biopharmaceuticals.</u>

Expert Review of Vaccines. 16 (2) (pp 151-159), 2017. [Library access only]

Pankiewicz, J. E & Sadowski, M. J. <u>APOE genotype and Alzheimer's immunotherapy.</u> Oncotarget. 8 (25) (pp 39941-39942), 2017. [Open Access]

Brudek, T. et al. <u>Autoimmune antibody decline in Parkinson's disease and Multiple System Atrophy; a step towards immunotherapeutic strategies.</u>

Molecular Neurodegeneration. 12 (1), 2017. [Library access only]

Finke, J. M. & Banks, W. A. <u>Modulators of IgG penetration through the blood-brain barrier:</u> <u>Implications for Alzheimer's disease immunotherapy.</u>

Human Antibodies. 25 (3-4) (pp 131-146), 2017. [Library access only]

Atri, A. et al. <u>Effect of Idalopirdine as Adjunct to Cholinesterase Inhibitors on Change in Cognition in</u> Patients With Alzheimer Disease: Three Randomized Clinical Trials.

JAMA. 319(2):130-142, 2018. [Library access only]

Bennett, D. A. <u>Lack of Benefit With Idalopirdine for Alzheimer Disease: Another Therapeutic Failure</u> in a Complex Disease Process.

JAMA. 319(2):123-125, 2018. [Library access only]

Schwartz, M. Can immunotherapy treat neurodegeneration?

Science. 357(6348):254-255, 2017. [Library access only]

Wang, H. et al. <u>Chronic oxidative damage together with genome repair deficiency in the neurons is a double whammy for neurodegeneration: is damage response signaling a potential therapeutic target?</u>

Mechanisms of Ageing & Development. 161(Pt A):163-176, 2017. [OpenAthens]

Tong, T. et al. <u>A Novel Grading Biomarker for the Prediction of Conversion From Mild Cognitive Impairment to Alzheimer's Disease.</u>

IEEE Transactions on Biomedical Engineering. 64(1):155-165, 2017. [OpenAthens]

Deming, Y. et al. <u>Genome-wide association study identifies four novel loci associated with Alzheimer's endophenotypes and disease modifiers.</u>

Acta Neuropathologica. 133(5):839-856, 2017 May. [OpenAthens]

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Joshi, C. R. <u>Destination Brain: the Past, Present, and Future of Therapeutic Gene Delivery.</u>
Journal of Neuroimmune Pharmacology: The Official Journal Of The Society
On Neuroimmune Pharmacology. 12(1):51-83, 2017. [OpenAthens]

Soininen, H. et al. 24-month intervention with a specific multinutrient in people with prodromal Alzheimer's disease (LipiDiDiet): a randomised, double-blind, controlled trial.

Lancet Neurology. 16(12):965-975, 2017. [OpenAthens]

Palluzzi, F. et al. <u>A novel network analysis approach reveals DNA damage, oxidative stress and calcium/cAMP homeostasis-associated biomarkers in frontotemporal dementia.</u>

PLoS ONE. 12(10):e0185797, 2017. [Open Access]

Ozadali-Sari, K. et al. <u>Novel multi-targeted agents for Alzheimer's disease: Synthesis, biological evaluation, and molecular modeling of novel 2-[4-(4-substitutedpiperazin-1yl)phenyl]benzimidazoles.</u>

Bioorganic Chemistry. 72:208-214, 2017. [Library access only]

Videnovic, A. et al. <u>Timed Light Therapy for Sleep and Daytime Sleepiness Associated With Parkinson</u> Disease: A Randomized Clinical Trial.

JAMA Neurology. 74(4):411-418, 2017. [Library access only]

Kovacs, G. G. et al. <u>Evaluating the Patterns of Aging-Related Tau Astrogliopathy Unravels Novel Insights Into Brain Aging and Neurodegenerative Diseases.</u>

Journal of Neuropathology & Experimental Neurology. 76(4):270-288, 2017. [OpenAthens]

Selected Library Books and Chapters

For location and availability please check Library Search, the Imperial College Library catalogue.

James, J. et al. 2017. Excellent dementia care in hospitals: A guide to supporting people with dementia and their carers.

Husain, M. & Schott, J. M. 2016. Oxford textbook of cognitive neurology and dementia, First ed.

Jenkins, C. et al. 2016. Dementia care at a glance.

Waldemar, G. & Burns, A. S. 2017. Alzheimer's disease, Second ed. [e-book also available]

Cummings, J. & Pillai, J. 2017. Neurodegenerative diseases: Unifying principles.

Emre, M. 2015. **Cognitive Impairment and Dementia in Parkinson's Disease**, Second ed. [Oxford Medicine Online e-book]

Ingelsson, M. & Lannfelt, L. 2016. Immunotherapy and biomarkers in neurodegenerative disorders.

Kovacs, G. 2015. Neuropathology of neurodegenerative diseases: A practical guide.

Oxford Medicine Online

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